Artur Benisek

List of Publications by Year
in descending order

72 papers	1,207 citations	394286 19 h-index	434063 31 g-index
73 all docs	73 docs citations	73 times ranked	1086 citing authors

#	Article	IF	Citations
1	A ternary feldspar-mixing model based on calorimetric data: development and application. Contributions To Mineralogy and Petrology, 2010, 160, 327-337.	1.2	126
2	Factors controlling the development of prism faces in granite zircons: a microprobe study. Contributions To Mineralogy and Petrology, 1993, 114, 441-451.	1.2	122
3	New developments in two-feldspar thermometry. American Mineralogist, 2004, 89, 1496-1504.	0.9	74
4	A sample-saving method for heat capacity measurements on powders using relaxation calorimetry. Cryogenics, 2011, 51, 460-464.	0.9	57
5	Plagioclase composition by Raman spectroscopy. Journal of Raman Spectroscopy, 2018, 49, 684-698.	1.2	41
6	The heat capacity of fayalite at high temperatures. American Mineralogist, 2012, 97, 657-660.	0.9	29
7	Thermodynamic mixing behavior of synthetic Ca-Tschermakâ€“diopside pyroxene solid solutions: I. Volume and heat capacity of mixing. Physics and Chemistry of Minerals, 2007, 34, 733-746.	0.3	28
8	Excess heat capacity and entropy of mixing in high structural state plagioclase. American Mineralogist, 2009, 94, 1153-1161.	0.9	28
9	Excess heat capacity and entropy of mixing along the chlorapatiteâ€“fluorapatite binary join. Physics and Chemistry of Minerals, 2010, 37, 665-676.	0.3	27
10	Thermodynamic properties of Na2Ti6O13 and Na2Ti3O7: electrochemical and calorimetric determination. Journal of Chemical Thermodynamics, 2003, 35, 1469-1487.	1.0	25
11	The uncertainty in determining the third law entropy by the heat-pulse calorimetric technique. Cryogenics, 2008, 48, 527-529.	0.9	25
12	Almandine: Lattice and non-lattice heat capacity behavior and standard thermodynamic properties. American Mineralogist, 2012, 97, 1771-1782.	0.9	25
13	A relationship to estimate the excess entropy of mixing: Application in silicate solid solutions and binary alloys. Journal of Alloys and Compounds, 2012, 527, 127-131.	2.8	25
14	The vibrational and configurational entropy of disordering in Cu3Au. Journal of Alloys and Compounds, 2015, 632, 585-590.	2.8	25
15	Excess heat capacity and entropy of mixing in ternary series of high-structural-state feldspars. European Journal of Mineralogy, 2010, 22, 403-410.	0.4	23
16	Grossular: A crystal-chemical, calorimetric, and thermodynamic study. American Mineralogist, 2012, 97, 1299-1313.	0.9	22
17	The accuracy of standard enthalpies and entropies for phases of petrological interest derived from density-functional calculations. Contributions To Mineralogy and Petrology, 2018, 173, 90.	1.2	22
18	Experimentally Determined Standard Thermodynamic Properties of Synthetic MgSO₄Â·4H₂O (Starkeyite) and MgSO₄Â·3H₂O: A Revised Internally Consistent Thermodynamic Data Set for Magnesium Sulfate Hydrates. Astrobiology, 2012, 12, 1042-1054.	1.5	21

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19	Transport properties of La0.4Sr0.6CoO3âˆ’. Solid State Ionics, 2001, 141-142, 375-380.	1.3	20
20	Thermodynamics, crystal chemistry and structural complexity of the Fe(SO4)(OH)(H2O) x phases: Fe(SO4)(OH), metahohmannite, butlerite, parabutlerite, amarantite, hohmannite, and fibroferrite. European Journal of Mineralogy, 2018, 30, 259-275.	0.4	20
21	Enthalpies in (Na,Ca)- and (K,Ca)-feldspar binaries: a high-temperature solution calorimetric study. Contributions To Mineralogy and Petrology, 2003, 145, 119-129.	1.2	19
22	Thermodynamic mixing behavior of synthetic Ca-Tschermakâ€“diopside pyroxene solid solutions: II. Heat of mixing and activityâ€“composition relationships. Physics and Chemistry of Minerals, 2007, 34, 747-755.	0.3	18
23	Thermodynamic mixing behavior of synthetic Ca-Tschermakâ€“diopside pyroxene solid solutions: III. An analysis of IR line broadening and heat of mixing behavior. Physics and Chemistry of Minerals, 2008, 35, 399-407.	0.3	17
24	Thermodynamic behavior and properties of katoite (hydrogrossular): A calorimetric study. American Mineralogist, 2012, 97, 1252-1255.	0.9	17
25	Arrhenius Behavior of the Bulk Na-Ion Conductivity in Na₃Sc₂(PO₄)₃ Single Crystals Observed by Microcontact Impedance Spectroscopy. Chemistry of Materials, 2018, 30, 1776-1781.	3.2	16
26	Heat capacity, entropy and phase equilibria of stishovite. Physics and Chemistry of Minerals, 2012, 39, 153-162.	0.3	15
27	Heat capacities of Tschermak substituted Fe-biotite. Contributions To Mineralogy and Petrology, 1999, 135, 53-61.	1.2	14
28	The heat capacity of two natural chlorite group minerals derived from differential scanning calorimetry. Physics and Chemistry of Minerals, 2001, 28, 332-336.	0.3	14
29	Thermodynamic properties of tooeleite, Fe63+(As3+O3)4(SO4)(OH)4Â·4H2O. Chemie Der Erde, 2016, 76, 419-428.	0.8	14
30	Excess heat capacity and entropy of mixing in the high-structural state (K,Ca)-feldspar binary. Physics and Chemistry of Minerals, 2010, 37, 209-218.	0.3	13
31	Activity-composition relationship in Tschermak's substituted Fe biotites at 700Â°C, 2 kbar. Contributions To Mineralogy and Petrology, 1996, 125, 85-99.	1.2	12
32	On the nature of the excess heat capacity of mixing. Physics and Chemistry of Minerals, 2011, 38, 185-191.	0.3	12
33	Heat capacity and entropy of rutile and TiO2II: Thermodynamic calculation of rutileâ€“TiO2II transition boundary. Physics of the Earth and Planetary Interiors, 2014, 226, 39-47.	0.7	12
34	Raman spectroscopic insights into the glass transition of poly(methyl methacrylate). Physical Chemistry Chemical Physics, 2021, 23, 1649-1665.	1.3	12
35	Thermochemistry of the alkali feldspars: Calorimetric study of the entropy relations in the low albite-low microcline series. American Mineralogist, 2014, 99, 76-83.	0.9	11
36	Thermodynamic mixing properties and behavior of almandineâ€“spessartine solid solutions. Geochimica Et Cosmochimica Acta, 2014, 125, 210-224.	1.6	10

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37	The stability of annite+quartz: reversed experimental data for the reaction 2 annite+3 quartz=2 sanidine+3 fayalite +2 H 2 O. Contributions To Mineralogy and Petrology, 1995, 121, 380-387.	1.2	9
38	Heat capacity and entropy of low structural state plagioclases. Physics and Chemistry of Minerals, 2013, 40, 167-173.	0.3	9
39	First-principles investigation of the lattice vibrations in the alkali feldspar solid solution. Physics and Chemistry of Minerals, 2015, 42, 243-249.	0.3	9
40	Thermodynamics, stability, crystal structure, and phase relations among euchroite, Cu2 (AsO4)(OH)Â·3H2O, and related minerals. European Journal of Mineralogy, 2017, 29, 5-16.	0.4	9
41	Electrochemical device for the precise adjustment of oxygen partial pressures in a gas stream. Solid State Ionics, 2004, 170, 99-104.	1.3	8
42	Heat capacity and third-law entropy of kaersutite, pargasite, fluoropargasite, tremolite and fluorotremolite. European Journal of Mineralogy, 2010, 22, 319-331.	0.4	8
43	Thermodynamic properties of FeAsO 4 Â·0.75H 2 O - a more favorable disposable product of low As solubility. Hydrometallurgy, 2016, 164, 136-140.	1.8	8
44	Thermodynamic properties of mansfieldite (AlAsO₄Â·2H₂O), angelellite (Fe₄(AsO₄)₂O₃) and kamarizaite (Fe₃(AsO₄)₂(OH)₃Â·3H₂O). Mineralogical Magazine, 2018, 82, 1333-1354.	0.6	8
45	Heat capacity, entropy, and phase equilibria of dmitryivanovite. Physics and Chemistry of Minerals, 2012, 39, 259-267.	0.3	7
46	Calorimetric study of the entropy relation in the NaClâ€“KCl system. Journal of Chemical Thermodynamics, 2013, 62, 231-235.	1.0	7
47	Thermodynamic mixing properties and behavior of grossularâ€“spessartine, (Ca Mn1â ̂')3Al2Si3O12, solid solutions. Geochimica Et Cosmochimica Acta, 2014, 141, 294-302.	1.6	7
48	Furfuryl Alcohol and Lactic Acid Blends: Homo- or Co-Polymerization?. Polymers, 2019, 11, 1533.	2.0	7
49	Thermodynamic properties, crystal structure and phase relations of pushcharovskite [Cu(AsO₃OH)(H₂O)â€‰â‹…â€‰0.5H<s geminite [Cu(AsO₃OH)(H₂O)] and liroconite [Cu₂Al(AsO₄)(OH)<sub>4&	0.4	7
50	Control of Oxygen Partial Pressure by means of H[sub 2]â€“H[sub 2]Oâ€“O[sub 2] or COâ€“CO[sub 2]â€“O[sub 2] Gas Mixtures. Journal of the Electrochemical Society, 2005, 152, H157.	1.3	6
51	The Structure and Thermochemistry of Three Fe-Mg Chlorites. Clays and Clay Minerals, 2015, 63, 351-367.	0.6	6
52	P21/c-C2/c phase transition and mixing properties of the (Li,Na)FeGe2O6 solid solution: A calorimetric and thermodynamic study. Journal of Chemical Thermodynamics, 2018, 120, 123-140.	1.0	6
53	The vibrational and configurational entropy of Î±-brass. Journal of Chemical Thermodynamics, 2014, 71, 126-132.	1.0	5
54	Standard-state thermodynamic properties of annite, KFe3[(OH)2AlSi3O10], based on new calorimetric measurements. European Journal of Mineralogy, 2015, 27, 603-616.	0.4	5

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55	Thermodynamics and crystal chemistry of rhomboclase, (H₅O₂)Fe(SO₄)₂Â·2H₂O, and the phase (H₃O)Fe(SO₄)₂and implications for acid mine drainage. American Mineralogist, 2017, 102, 643-654.	0.9	5
56	Thermodynamics of disordering in Au3Cu. Journal of Alloys and Compounds, 2018, 735, 1344-1349.	2.8	5
57	Vibrational entropy of disorder in Cu₃Au with different degrees of short-range order. Physical Chemistry Chemical Physics, 2018, 20, 19441-19446.	1.3	5
58	A new activity model for Mgâ€“Al biotites determined through an integrated approach. Contributions To Mineralogy and Petrology, 2019, 174, 76.	1.2	5
59	Thermodynamic properties of calcium alkali phosphates Ca(Na,K)PO4. Journal of Materials Science, 2020, 55, 8477-8490.	1.7	5
60	Prediction and observation of formation of Caâ€“Mg arsenates in acidic and alkaline fluids: Thermodynamic properties and mineral assemblages at JÃ¡chymov, Czech Republic and RotgÃ¼lden, Austria. Chemical Geology, 2021, 559, 119922.	1.4	5
61	Annite stability revised: hydrogen-sensor data for the reaction annite = sanidine + magnetite + H 2 : additional results and reply to Chou. Contributions To Mineralogy and Petrology, 1997, 128, 306-311.	1.2	4
62	Heat capacity measurements of CaAlSiO4F from 5 to 850 K and its standard entropy. American Mineralogist, 2018, 103, 1165-1168.	0.9	3
63	Excess enthalpy of mixing of mineral solid solutions derived from density-functional calculations. Physics and Chemistry of Minerals, 2020, 47, 15.	0.3	3
64	Chapmanite [Fe₂Sb(Si₂O₅)O₃(OH)]: thermodynamic properties and formation in low-temperature environments. European Journal of Mineralogy, 2021, 33, 357-371.	0.4	3
65	The assimilation of felsic xenoliths in kimberlites: insights into temperature and volatiles during kimberlite emplacement. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	3
66	Thermodynamic data of belite polymorphs. Cement and Concrete Research, 2022, 152, 106621.	4.6	3
67	Crystal chemistry, MÃ¶ssbauer spectroscopy, and thermodynamic properties of botryogen. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2016, 193, 147-159.	0.1	2
68	A new activity model for Feâ€“Mgâ€“Al biotites: IIâ€”Applications in the K2Oâ€“FeOâ€“MgOâ€“Al2O3â€“SiO2â€“H2O (KFMASH) system. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	2
69	Excess heat capacity and entropy of mixing along the hydroxyapatite-chlorapatite and hydroxyapatite-fluorapatite binaries. Physics and Chemistry of Minerals, 2021, 48, 44.	0.3	2
70	Study on the structural phase transitions in NaSICON-type compounds using Ag₃Sc₂(PO₄)₃ as a model system. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 10-22.	0.5	2
71	Stability and calorimetric studies of silicoâ€•ferrites of calcium aluminum and magnesium. Journal of the American Ceramic Society, 2018, 101, 4193-4202.	1.9	1
72	A new activity model for Feâ€“Mgâ€“Al biotites: Iâ€”Derivation and calibration of mixing parameters. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	0